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Brexit, foreign investment and employment: some implications for industrial policy?

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Abstract

Inward investment in the UK is likely to be negatively impacted in a number of ways in the event of a 'hard Brexit' via tariff barriers, but even "softer" forms of Brexit such as the current potential agreement are likely to cause customs delays, limits to the ability of firms to relocate staff, and to coordinate "servitization" activities. In addition are the the negative impacts of currency depreciation. In the context of already existing job market polarisation, inward investment flows in advanced manufacturing, food technology and financial services, which can bring 'good quality' jobs, are especially vulnerable under Brexit to frictions in global value chains. After highlighting the case of the auto industry, the paper moves on to stress the links between inward investment, employment restructuring and job quality given the employment opportunities foreign firms create.

Keywords

Brexit, foreign direct investment, global value chains employment, job quality, regions, industrial policy.

Introduction

This paper makes suggestions for developing industrial policy in the UK post Brexit, starting with an appreciation of how Brexit will impact on foreign investment flows in to the UK. The latter is especially important for the UK economy. The paper notes that inward investment is likely to be negatively impacted in a number of ways in the event of a 'hard Brexit' via tariff barriers, customs delays which will make running supply chains across borders more difficult, and the negative impacts of currency depreciation. After highlighting the case of the auto industry, the paper moves on to note the links between inward investment, employment restructuring and job quality given the employment opportunities foreign firms create. The paper points out that the UK economy already has one of the most flexible labour markets in the developed world apart from the United States, so greater labour market flexibility will be of limited value in offsetting the negative impact of Brexit on inward investment flows. Indeed, post Brexit, further increases in labour market flexibility to improve the UK's competitiveness in terms of labour cost and hence attract foreign investment risks a 'race to the bottom'. In the context of job market polarisation, investment in advanced manufacturing, food technology and financial services, which can bring 'good quality' jobs, is especially vulnerable under Brexit to frictions in global value chains. In concluding, we point to a range of 'design principles' in developing industrial policy to attempt to mitigate some of the negative impacts of Brexit.

The importance of inward investment to the UK economy

Inward investment is of vital importance to the UK economy. Compared to other G7 countries, the UK has had the highest percentage of inward FDI as a percentage of GDP, at 64 per cent of GDP in 2014 (ONS 2016). Much of this investment is from other EU member states, as Figure1 shows.

Figure 1 about here

Source: House of Commons Library, 2016

Indeed, ONS data indicates that the greatest contributor to foreign-owned businesses' gross value added was EU business at 49.5% of the total and since 2008.ⁱ The next highest contributor was the Americas; with 42%, while Asia, while third, experienced growth of 94% over the same period. At a macro level, one can speculate that a major attraction of the UK for non -EU investors has been access to the single market, while intra EU investment is a combination of firms seeking to access UK markets directly, and also coordinating activities along supply chains across locations. In addition, the proportion of R&D done by foreign firms passed 50% for the first time in 2011 and has been higher than that of UK-owned firms every year since then, except in 2016 when it was equal.ⁱⁱ

Understanding the importance of inward investment to job creation in the UK requires an understanding of investors' motivation for being in the UK and also the activities that they undertake in the UK. Most of the investment in the UK from abroad may be classified as either 'market seeking', that is, coming to the UK to serve customers across the single market or in the UK, or alternatively 'efficiency seeking FDI'. The latter refers to firms seeking the most efficient location to supply multiple markets and enable post-export activities. In order for efficiency seeking investment to take place, cross-border markets must be well developed and open; this type of investment usually flourishes in regionally integrated markets. Typically both types of inward investment are characterised by local multiplier effects and supply chain activity, which bring additional benefits to the host economy.

In order to understand the activities that inward investors undertake, one has to consider the nature of Global Value Chains (GVCs - the processes/activities by which a company adds value to an article) and the way in which multinational firms organise their value chains. Figure 2 illustrates the well-known 'smile curve' and the organisation of a GVC.

Figure 2 about here

The UK has seen concentrations of activities at either end of the curve, with R&D and design based in the UK to the extent that more than 50 per cent of the private sector R&D carried out in the UK is done by foreign Multinational Enterprises (MNEs). As for high value services and customer focussed activity ('servitisation') at the other end, one could argue that the UK has been potentially one of the greatest beneficiary globally of this new order of activity.

How is inward investment likely to be affected by the UK leaving the European Union?

Investors in the UK will face a number of challenges as a result of Brexit if they seek to sell into the EU and operate supply chains that cross between the UK and the UK. Firstly, Japanese inward investors, backed by the Japanese government, have been keen to stress that future investment in the UK depends on tariff free and barrier free trade with the EU that is as uncomplicated and predictable as possible. A Japanese government memorandum has expressed concerns over the continued viability of Japanese investment in the UK in the event of a 'hard Brexit' without access to the EU Single Market. Nissan, for example, has commented that it will review its decision to build the next generation of a model in the UK when the form of Brexit is clearer (Bailey and De Propriis, 2017).

Secondly, there will be challenges for investors if they seek to operate supply chains that cross (sometimes several times) between the UK and EU. When the single market was created in 1993, many commentators speculated that intra-EU FDI would plummet. This turned out to be far from the case as firms took advantage of the opportunities to coordinate resources across countries. The single market connects innovative firms to the richest market in the world and, through EU regional policy and structural funds, allows firms to take full advantage of location economies where labour is available in low-cost locations. Honda, for example, has warned MPs of the consequences of leaving the customs union (House of Commons, 2018).

Thirdly, the devaluation in sterling will also have an impact on inward investment decisions. As Driffield and Karoglou outline, the existing literature has some problems identifying the links between inward investment and currency depreciations. On the one hand, the depreciation in the pound makes UK assets cheaper for foreign investors, but on the other hand, the expected returns denominated in home currency also decline. Identifying the dominant effect is therefore problematic. Driffield and Karoglou (2018) analysed 50 years of time series data for inward investment into the UK and found that in (typically brief) periods of uncertainty, a depreciated sterling offers a temporary positive effect on FDI. But when the economy returns to being stable once again, this positive effect is not only annulled but becomes both reversed and persistent. In other words, a weaker currency will eventually lead to concerns over lower future returns to dominate strategic thinking. This, in turn, will inevitably drive investment elsewhere.

Case Study: the Automotive Sector in the UK

Much of UK manufacturing is deeply interconnected with the EU through complex cross-border value chains. Such value chains comprise intricate processes of value-adding by firms in different countries, with component goods and services crossing borders multiple times before reaching the final consumer. The auto sector is a case in point.

By way of example, a typical driveline system produced by GKN, the British-based supplier of automotive driveline technologies and systems, incorporates specialist

forged parts from the UK, Spain, Italy, France and Germany. These are assembled at GKN Driveline's UK factory in Birmingham and supplied to automotive assemblers in the UK and EU. This is illustrated in Figure 1 below. The components, assembled drivelines and the then final assembled car could cross the English Channel several times (Bailey and De Propris, 2017).

Figure 1 about here.

As noted above, these value chains need to be 'frictionless' in terms of tariff as well as non-tariff barriers (such as regulations and standards). As KPMG (2016: 13) have noted:

"Original equipment manufacturers such as aircraft and automotive manufacturers could perhaps favour the simplicity and flexibility of an EU-supply base rather than dealing with the potential complexities of a company based outside the union. In the long term, more EU-based alternatives would emerge. As buyers churned their suppliers, UK firms might become more marginalised. The integration of supply chains is a double edged sword – our manufacturers are not indispensable".

It is a similar story for BMW which assembles engines at its Hams Hall engine assembly plant near Birmingham. Engine blocks come in from France before being processed at the plant. They may go to Germany for further work before being assembled. The engine may go into a MINI assembled at Oxford or the Netherlands, or into a BMW assembled in Germany. The final car could be sold anywhere in Europe or globally. Components, engines and the final car could cross the channel numerous times in total.

The most deeply integrated GVCs are Just-In-Time (JIT) supply chains. These originated in the Japanese automotive and electronics sectors, and are now widespread across many sectors in the UK and EU, including in manufacturing, engineering, retail and consumer goods markets (Bailey et al, 2018).

JIT boosts assembly plant efficiency in a number of ways. In delivering components just when they are needed, and only in the precise quantity required, defects are revealed (hence improving quality), stock levels are reduced and the need for warehousing space and associated costs are reduced. Yeon Kim and McCann (2008) noted that prior to the 1980s, some \$600-\$800 of capital was tied up in per car inventory in the US auto industry, compared with just \$75-\$150 in Japan's, which had embraced JIT principles. As a result, the average Japanese assembly plant was some 600,000 ft² smaller than its US equivalent. Widespread adoption of JIT in automotive industries from the mid-1980s onwards led to rapid falls in inventory levels and cost reductions notwithstanding implementation challenges (ibid), including across the EU's auto industry.

So in JIT supply chains, firms hold little or no inventories. Supplies are delivered in very small quantities at high frequencies from suppliers which are located in nearby regions or countries. But for JIT to work, the whole delivery system has to be seamless or frictionless. The frictionless trade enabled by the EU's Customs Union and Single Market allow such cross-European JIT supply systems to operate smoothly (ibid).

One example of JIT in operation is the Swindon assembly plant of Honda UK. In evidence to the Business Select Committee late last year, Honda said that it retained just four hours' worth of parts at the Swindon production line, with cars made to order in response to consumer demand and parts delivered in sequence for that particular build. The plant requires 350 trucks' worth of components to be delivered every day from Europe (House of Commons, 2018). Components arrive from EU suppliers within 5 to 24 hours and Honda – like other automotive assemblers – fear that border checks in the event of a 'hard Brexit' could cause serious disruption to supplies requires stockpiling of components at considerable costs (Financial Times, 26/06/18). The Japanese-owned firm stated that every 15 minutes of customs delay would cost it up to £850,000 a year, and that it would take the firm 18 months to set up new procedures and warehouses if Britain left the Customs Union. Even then, with 2 million daily component movements, just minor delays at the Channel Tunnel and Dover would force hundreds of its trucks to wait for the equivalent of 90 hours a day (House of Commons, 2018). The firm has stated a warehouse capable of holding nine days' worth of Honda stock would need to be roughly 300,000 sq m, and be one of the largest buildings on earth (Financial Times, 26/06/18). Some 75% of such components for Honda come via the Channel tunnel rail link, which is likely to become a major bottleneck especially in the context of border checks under a 'hard Brexit' on a large volume of small consignments. This could force Honda and other auto assemblers to shift to using sea routes. The latter are much less frequent, need larger deliveries and add several days of delay (Financial Times, 26/06/2018).

Honda's government affairs manager, Patrick Keating stated that "*outside of the customs union, there is no such thing as a frictionless border. I wouldn't say that the just-in-time manufacturing model wouldn't work, but it would certainly be very challenging*" (ibid). As a result, even short hold-ups at customs borders will likely cause major problems for the fine-grained supply chains involved in UK manufacturing and especially automotive, and will likely making Britain a less competitive place to assemble cars, for example.

Indeed, if the UK leaves both the European customs union and the EU Single Market then it is very difficult to see how such cross-border JIT systems can survive in their current form. Customs processes, however, short, are simply incompatible with these systems, because of the uncertainty associated with delivery time variations.ⁱⁱⁱ So it is little surprise that the House of Commons Business Select Committee concluded that "non-tariff barriers, in the form of border delays and increased bureaucracy, will... affect UK competitiveness. We recommend that the Government should, in its negotiations, place a high premium on securing frictionless trade for the automotive sector" (ibid).

It should be noted that a Canadian style Free Trade Area (FTA) would not solve such problems. Individual truck-containers not only contain components from numerous different suppliers, but the combinations in each container will differ from day to day and even hour to hour depending on the model mix going down the production line at the end assembly plant (Bailey et al, 2018). In this context, enforcing compliance with the EU 'rules of origin' requirements would make cross-border JIT systems almost impossible to operate. Nor will the UK be able to easily

switch to domestic suppliers in order to satisfy the EU's local content requirements, as local content is far below the required 60% needed under the EU's FTA rules.^{iv}

Inward investment, employment restructuring and job quality

Inward investment is of vital importance to the UK economy, not least because of the employment opportunities foreign firms create, often in areas of high unemployment, such as the North East. Many high profile manufacturing sectors, such as the automotive sector highlighted above, are dominated by inward investors, along with professional service firms, especially in sectors such as finance. Analysis of firm level data collected by ONS for 2012-2015 reveals that firms with some foreign ownership account for around 20% of employment (ONS, 2017a). This large contribution is explained by the fact that FDI recipients in the UK are typically large multinational enterprises (MNEs). This concentration is higher in certain regions, with well-known clusters built around inward investment, such as automotive in the West Midlands. Firms with inward FDI were more productive than non-FDI firms and this is not limited to those sectors thought of as being high tech sectors, but includes large employers in other sectors. Analysis of firm level data suggests for example that the most productive drinks manufacturer in the UK is Heineken¹. However, approximately half of this productivity difference is accounted for by the fact that MNEs are more prevalent in higher value added sectors and it should also be noted that the productivity gap between inward investors and the highest performing UK firms is much smaller than this headline figure.

According to the most recent analysis by the ONS, in 2016 the UK businesses which received FDI employed 4 million people, 17% of all UK employees (ONS, 2018, Table 2).² Half of these people (2.1 million) were employed by firms that received FDI from the EU, with The Netherlands, Luxembourg, France and Germany being the four largest countries. Similarly to employment, just over half of the approximate gross value added (aGVA)³ that was created by UK businesses in receipt of FDI was created by firms that received investment from the EU, and the total value of GVA from EU firms was £170 billion. The labour productivity, calculated as GVA per worker, of UK firms which receive FDI from the EU is over 70% higher on average than that of a UK firm that does not receive FDI from abroad (ONS 2018 Figure 21). The higher productivity of firms that receive FDI may be explained by the benefits of economies of scale, more advanced technology and having better access to international best practice, including management practices. Economic theory suggests that more productive firms pay higher wages.

To assess the likely impact of Brexit on jobs and employment restructuring in more detail, first we explore recent trends in employment patterns in the UK.

¹ Authors calculations from the "Orbis" dataset provided by Bureau Van Dijk (accessed 06/12/2018)

² These employment figures differ from those presented in the Annual Business Survey release as they are based on micro-data from the Inter-Departmental Business Register, which uses a combination of business survey returns and administrative sources to populate employment estimates for every individual UK business.

³ Approximate gross value added (aGVA) measures the value of goods and services produced and is closely linked to gross domestic product (GDP), although GDP includes taxes minus subsidies in production.

Employment restructuring in EU Member States is regularly assessed by Eurofound, the European Foundation for the improvement of living and working conditions. Their method is a 'jobs based approach' that focuses on the change in the number of jobs and uses pay as a proxy for job quality. The pay range of jobs is divided into quintiles and the change in the number and proportion of jobs in each quintile is charted over time (Eurofound, 2015). This analysis has revealed three trends for the UK: job polarization, an increase in non-standard forms of employment in general and in the worst paid jobs in particular.

Eurofound's research found that polarization (illustrated in Figure 4 for a shorter time period) has characterised the UK labour market since the 1980s: employment growth was observed in the lower and higher quintiles, while employment in the middle quintile contracted. The global financial and economic crisis further polarised the UK's employment structures: during 2011-2013 employment contracted in all quintiles except the top one. When employment levels started to increase in 2013-2014, and over 800,000 net new jobs were created in a twelve-month period, the largest employment growth was observed in the lowest two quintiles⁴. Polarization leads to the 'hollowing out' of the labour market: the disappearance of decent jobs in the middle pay quintile.

Figure 4 about here

Figure 4 Employment change by job-wage quintile, 2011-14, UK and the EU (1000s)

Note: The lowest quintile is on the left, the highest quintile is on the right.

Source: *Eurofound* (2015)

The second trend in the UK labour market is the growing share of non-standard employment, particularly: bogus self-employment and zero-hours contracts. While offering flexibility and lower costs for employers, zero hours contracts offer no income stability for workers and discourage investment in training either by employers or the workers. As a result, these jobs tend to encourage a downward spiral of productivity. Moreover these jobs are not necessarily temporary — over half of those on zero hours contracts have been employed on these terms for more than a year, some more than 5 years (ONS, 2016b).

Another form of non-standard, flexible work is self-employment. While in most advanced economies, including the US, rates of self-employment have fallen, in the UK there has been a sustained growth (Ashworth *et al.*, 2014) and by the end of 2016 15% of all those in work were self-employed (ONS 2017b). Self-employment is seen as an outcome of the flight from unemployment: much of self-employment is enforced and provided through temporary work agencies, with applicants having to be registered as self-employed to be eligible for placement in temporary positions (TUC, 2015). The average weekly earnings (excluding bonuses) of the self-employed in the UK fell by 26% between 2007/08 and 2015/16 (Full Fact, 2018). Finally, the proportion of part-time workers who want to work full-time but cannot find full-time jobs is also markedly above the long-term average (ONS 2017b).

⁴ In Germany and Italy there was also relatively faster growth in low-paid jobs in 2013–2014 than previously.

To summarise these trends, intensive job creation since the end of the Global Financial Crisis has reduced unemployment in the UK, however, many of the new jobs can be characterised as ‘bad jobs’: low paid, insecure and with limited opportunities for progression. A study by Goodwin and Heath (2016) suggests that bad jobs may have contributed to the outcome of the EU referendum, with 71% of those working in routine manual occupations voting leave.

Turning to the effects of Brexit and on jobs created by FDI, foreign investment in technology-driven high-skill sectors in the UK has created higher-paid jobs, and increased the demand for higher-skilled employees, such as technicians, engineers and IT specialists, leading to skills shortages in these occupations. Hard Brexit would jeopardise inward investment and the location here of these jobs by MNEs. In other words, the UK’s leaving the single market will make it more difficult for European businesses to invest in the UK economy, putting almost 20% of current jobs, some of the UK’s relatively ‘good jobs’ at risk.

Mitigating the impact of Brexit?

Policy makers at the national level acknowledged the problems of the ‘squeezed middle’ and those in low-paid jobs after the EU Referendum. Following Theresa May’s speech in July 2016 that announced the goal of making “the economy work for everyone” and having a “proper industrial strategy to get the whole economy firing” (Conservative Party 2016), the Government released the *Building our Industrial Strategy* Green Paper which set out proposals for a post-Brexit Industrial Strategy (HM Government 2017). In this document, however, the problem of low wages is discussed primarily as a barrier to productivity rather than a problem in its own right.

On the basis of current UK government policy it is reasonable to assume, that we will see further increases in labour market flexibility to try to deal with the UK’s competitiveness problem in terms of labour cost. Such policies have proved popular with inward investors, and the greater labour market flexibility in the UK compared with countries such as Germany and France have long been linked with the historically high levels of inward investment in the UK. Critics point out that the UK labour market is already one of the most flexible ones in the developed world apart from the US, so increased flexibility is unlikely to have any benefits. In addition, this type of ‘race to the bottom’ competitiveness is often criticised and rightly so. There is an emerging consensus among labour market and social policy experts that it is not enough to create jobs; rather better jobs are needed.

From an inward investment perspective the essential problem is that the ‘middle region’ of activities of the value chain, characterised by lower value added and a higher volume of employment, are typically carried out outside the UK. Developed countries attempt to ‘plug the gap in the middle’ by seeking inward investment that will generate employment for the ‘squeezed’ middle. This can be achieved by identifying key sectors that hit the ‘sweet spot’ of high productivity but also employment generation. However, these sectors, such as advanced manufacturing, food technology and financial services, are the ones that are most vulnerable to frictions in value chains which drive away investment, due to the way they are organised in the single market.

Furthermore, it is established in the literature (Davoine *et al.*, 2008) that inward investment will either generate large scale employment in relatively low value added activities, or, that it generates few jobs in more high value added activities. An example of the former may be logistics, or perhaps sectors of growing importance such as recycling. An example of the latter may be aspects of life sciences such as clinical trials, which offer undeniable value but limited volume. Therefore an inward investment strategy should create a mix of these sectors at the local level. The high value added investment brings new technology, potentially spillovers, and develops knowledge transfer and training into supply chains and related sectors.

Drawing on a wide range of research evidence, the policy recommendations by Warhurst (2017) are not concerned with creating jobs, rather the focus is on improving job quality. Acknowledging that some firms deliberately take the low road (offering insecure jobs), the adoption and enforcement of labour standards regulation by the government is recommended. For example, Australia has introduced national employment standards which list minimum entitlements to all employees (Fair Work Australia, quoted in Warhurst, 2017).

In the UK context, Green *et al.* (2017) adopted a different approach. Their research explored how wages can be increased in those lower-paid sectors of the UK economy where a growth in demand for labour was forecast (accommodation and food services, wholesale and retail and residential care). They recommended policies that would help upgrading employee skills and developing 'career ladders' to improve productivity and innovation and achieve higher wages. The analysis has also highlighted that the most important factor which drives wage increases in these three sectors is the aggregate demand for labour in a local area. Therefore, sector based policies alone will not achieve the desired higher wages - these policies need to be part of a broader, holistic economic policy which considers local and regional economies as a whole and supports job creation.

Some design principles for future regional industrial strategy

There is a danger post-Brexit danger that the UK's weaker regions will be disproportionately adversely affected by Brexit (RSA, 2017). 'Non-core' regions in the UK are economically more dependent on the EU than the UK's core regions (Los *et al.*, 2016) through trade and value chain linkages as well as EU cohesion funding: there is a risk is that interregional inequalities may be exacerbated by any post-Brexit trade arrangements which reduce access to the EU Single Market (RSA, 2017). Aside from EU Cohesion Policy the UK has had made limited use of place-based policies. Post-Brexit the UK has to find ways to decentralise and devolve in a manner that does not further weaken lagging regions.

In this context, having considered the possible impact of Brexit on inward FDI and the complex interrelationships between inward FDI and employment restructuring, we offer some considerations for future industrial strategy. These include a number of 'design principles' for policy to mitigate the negative effects of Brexit on inward investment and job creation. It should be noted that enacting these effectively may well require greater devolution of power and responsibilities to the sub-national level.

This could involve the creation of development bodies that can intervene more widely and strategically at a regional level, and do ‘smart specialization’ through regional level industrial policies (RSA, 2017). Combined Authorities may be one way to do that (in cities at least). Strengthening local capacity will be critical here, such as via building up local growth hubs to fill the vacuum left by the abolition of – for example - the Manufacturing Advisory Service (MAS). This could be part of a ‘Combined Authority Plus’ model, as could devolution of skills funding to the regional level.

Above all, the government needs to avoid a ‘hard Brexit’ that sees tariff barriers returning, and, ideally, secure a trade deal that prioritizes access to the Single Market for as many sectors as soon as possible.

It is also important to note that the UK should not return to the days prior to the single market, when regions effectively competed with each other for foreign investment, for example through subsidies offered to investors. Rather, we advocate a UK-wide FDI strategy based on understanding the benefits of a particular form of investment to the region, linked to key sectors. It also needs to be noted that there is a basic tension between competitiveness achieved by offering inward investors access to a low cost, flexible workforce and ensuring decent work and wages to employees. Coming out of the analysis above, we would stress the following design principles:

Reconsidering the value proposition to inward investors. Locations will need to consider the nature of their value proposition to inward investors, backed up by land availability, which may involve some difficult decisions regarding opening greenbelt land. Part of this proposition also involve building more robust supply chains to support inward investors, addressing skill shortages, and working with firms and universities such that they become anchors for both foreign and domestic investment. This will require a more activist industrial policy in terms of, say, rebuilding supply chains in the UK and encouraging ‘reshoring’ (Bailey and De Propriis, 2014). It is possible that UK regions may be able to be more proactive in attracting inward investment, although as noted above it is important that this does not herald a return to the excessive subsidies that were paid in the 1990s.

Develop an inward investment strategy through greater understanding of why firms seek to invest in the region. High value added FDI adds significantly to the underlying technological base of the economy, but creates fewer jobs, while FDI that generates large scale employment is typically (though not always) associated with less cutting edge technology. So any new strategy needs to communicate which activities will be able to attract inward investment of what type, and where this is most likely to be sourced from. This emphasises not ‘sectors’ per se, but rather activities on the value chains, where activity within the region is positioned within an international setting, and the vulnerabilities of value chains to global changes are recognised. The latter can include macroeconomic factors such as exchange rate changes or changing terms of trade as well as shifts in the nature of the value chain itself (Pejic et al, 2018).

Consider value capture as well as value creation. Current thinking suggests that co-creating value, and *capturing* such co-created value in a sustainable way, through

the co-creation of sustainable regional ecosystems, and the adoption of requisite positioning and specialisation in global and local value chains strategies, can be seen as a new rationale for regional place-based industrial policies (Bailey et al, 2018a). In this context, UK regions could aim to position themselves as niche players, that specialise in difficult to replicate 'bottleneck assets' in advanced manufacturing products and hard-to-imitate services, based on regional histories and legacies (ibid).

Focus inward investment efforts on sectors where free trade with the EU is less important. This might mean, for example: seeking to maximise the benefits of large scale 'anchor' investments in infrastructure (in the context of the Midlands for example, HS2); recognising the need to support skills in jobs around project management and professional services associated with infrastructure projects; and building robust supply chains to support infrastructure development.

Maximise the returns on inward investment. This again requires an understanding of the benefits of inward investment, for example of the benefits to supply chains or through knowledge transfer from inward investors into local firms. In order to understand how policy levers in this space can be applied, one has to understand the motivation and financing of FDI. For example, in the years prior to the GFC, a high proportion of global FDI was funded by debt; this has since not been available. One response therefore might aim to seek FDI which is genuinely exogenous to the UK, i.e. funded not by loan financing raised from UK capital markets, but from the home country. This varies by country. Much Asian FDI for example is now funded by cash flow generated in the home country, compared with US, EU and Japanese investment which is typically debt financed. A country strategy is required therefore for investment promotion agencies as well as a sectoral strategy.

When selecting key sectors for inward investment, focus on job creation as well as value added

Policy makers have a wider remit than simply generating productivity growth, in that they have to undertake a matching exercise between the value proposition of a given locality or region and the type of investment that they can attract. It should be recognised that from an employment and productivity position, all investment is good investment. While obviously high skill, high value added jobs will increase productivity the most, generating employment for less skilled people may well increase aggregate value added by more. Equally, lower value added jobs tend to fill from the local labour market, rather than attracting people in from outside. Sector based policies need to be part of a broader, holistic economic policy which considers local and regional economies as a whole and supports job creation.

Focus on job quality rather than just the number of jobs created. There is not a trade-off between creating jobs and job quality (Driffield and Kim, 2018). In other words more and better jobs are compatible. Often inward investment, and their accompanying supply chains have a disproportionate influence with policy makers,

as the current Brexit debates illustrate. Often inward investors can influence local and regional skills strategies to fill skills gaps in ways that local firms often find challenging. Regions can then use the needs to service inward investors as part of their 'ask' of the national government around (the devolution of) education and training.

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Figure 1 GKN Driveline: illustration of an integrated supply chain (reproduced with permission of KMPG).

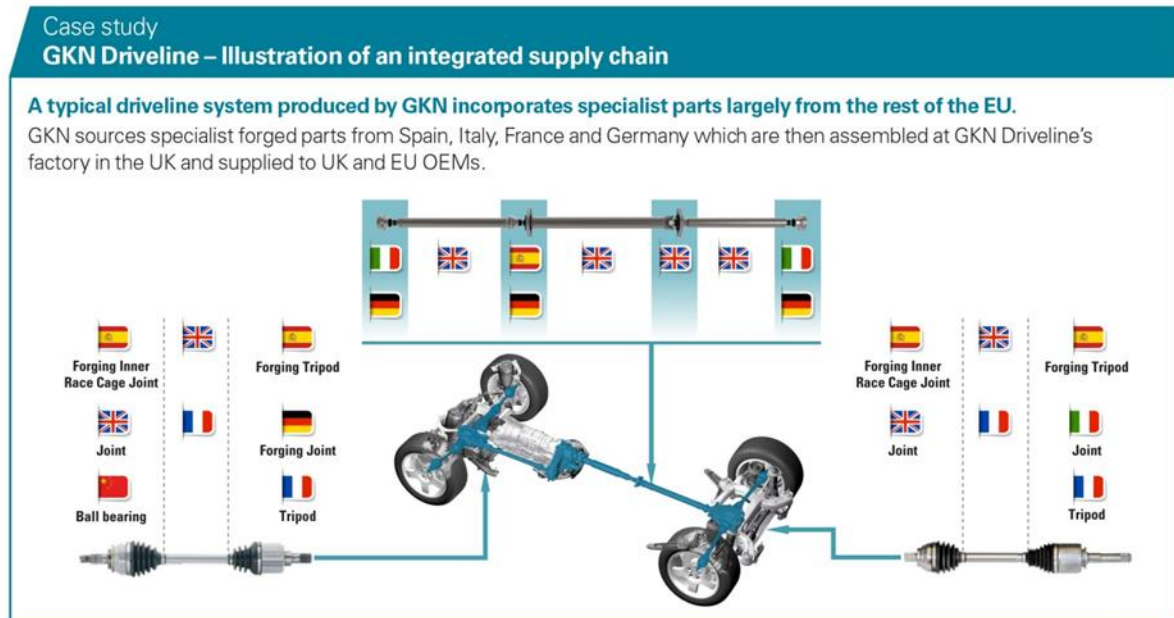
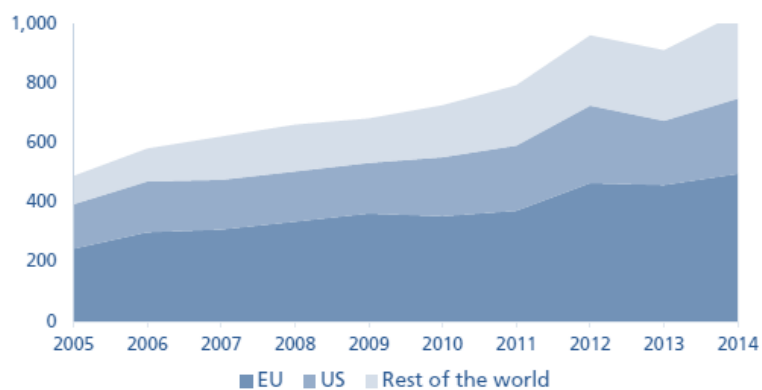
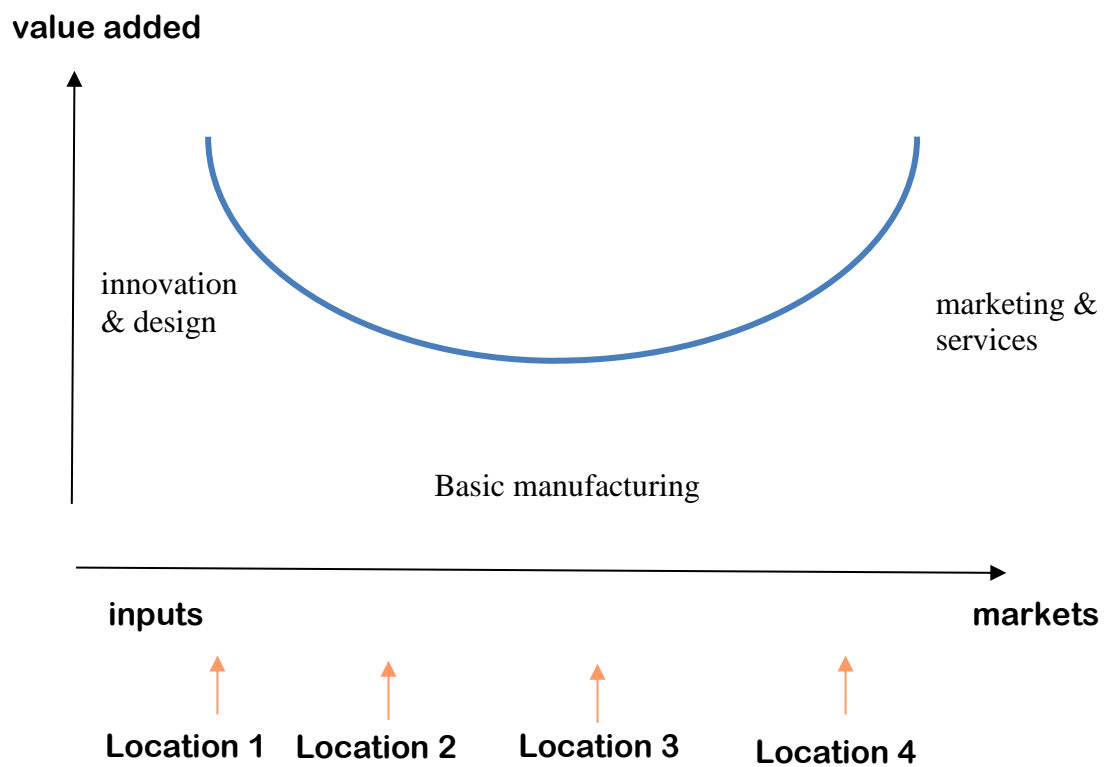


Figure 2 Inward investment to the UK by source (stock, £ billion)



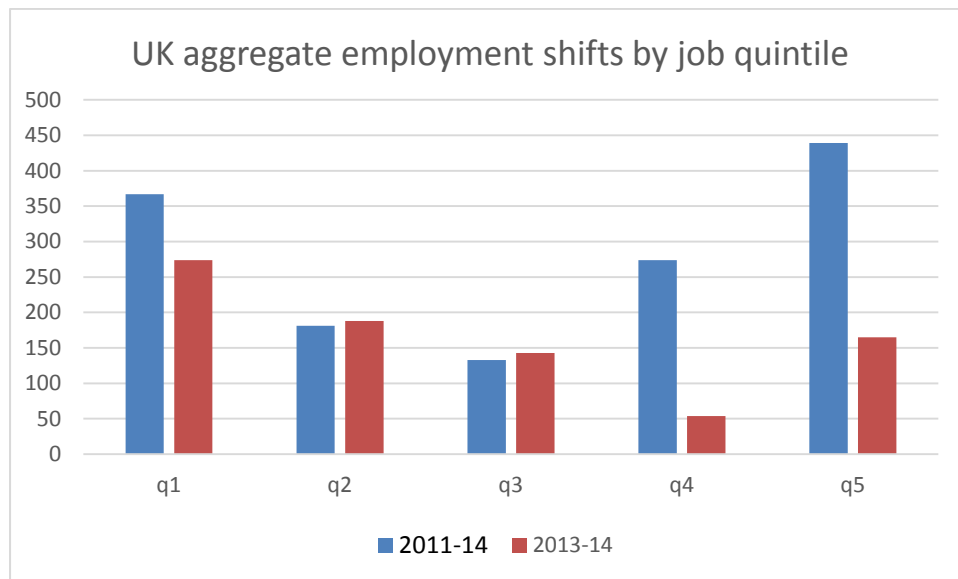
Source: House of Commons Library, 2016

Figure 3: The “smile” of value production⁵ :



⁵ Source: Adapted from Mudambi (2008).

Figure 4 Employment change by job-wage quintile, 2011-14, UK and the EU (1000s)



Note: The lowest quintile is on the left, the highest quintile is on the right.

Source: *Eurofound* (2015)

ⁱ See:

<https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/articles/annualbusinesssurvey/uknonfinancialbusinesseconomyforeignownedbusinesses2008to2015>.

ⁱⁱ See:

<https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/bulletins/businessenterpriseanddevelopment/2017#over-half-of-all-uk-business-expenditure-on-performing-rd-was-by-foreign-owned-businesses>.

ⁱⁱⁱ Aston Martin is even considering flying in engines supplied by Daimler from Germany in the event of a no deal Brexit (The Guardian, 15/11/2018).

^{iv} See Holmes (2016): he highlights difficulties to be overcome with sectoral deals for industries like automotive. While a Free Trade Agreement (FTA) would make exported cars free of tariffs into the EU, to benefit from this such exports would need to meet EU FTA Rules of Origin. These require 60% of a car's value added to be 'local' to benefit from the FTA (or with parts and components from the EU under a so-called 'cumulation' agreement). Furthermore, in order to eliminate border bureaucracy there would need to be a customs union arrangement and a Mutual Recognition agreement for conformity assessment. However, to ensure automatic mutual recognition of the UK's conformity assessment, EEA states have to accept supranational enforcement, which contradicts one of the UK's 'red lines' in Brexit talks.